

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Current Medicine Research and Practice

journal homepage: www.elsevier.com/locate/cmrp



Editorial

Physical distancing amidst social connectivity: Time to re-visit 'social distancing' as India fights COVID-19 and a few concerns



On the 30 January 2020¹ the World Health Organization (WHO) declared the present 2019-novel Corona virus (2019-nCoV) disease (COVID-19) epidemic to be a Public Health Emergency of International Concern (PHEIC). Coincidentally, on the same day India reported its first index COVID-19 case in Kerala in someone who had recently been in China.² Since then, India has been on a 'warfooting' against a possible major 2019-nCoV outbreak to prevent its community transmission and a possible spike in cases. In this regard, the central Government of India (GoI) has been implementing multiple concurrent countermeasures in coordination with State Governments.^{3,4} This includes active airport screening, quarantining, 'working from home', and case detection with contact tracing. The country has been under a nation-wide lockdown.^{3,4} since 24th March 2020 and efforts are being scaled-up to create public awareness to practice 'social distancing'.^{5–8}

'Social distancing' is a broad term referring to a set of multiple non-pharmaceutical interventions that are clubbed together under a common umbrella. These include prohibition of mass gatherings, maintaining 2m safe physical distance between individuals, voluntarily staying-at-home, avoiding physical contact and touching any inanimate object that might have a potential fomite. It helps to prevent a sharp peak of infections or, in other words, 'flattens the epidemic curve', and thus, prevents the risk of our healthcare system becoming overwhelmed. The Prime Minister (PM) of India in his addresses to the nation regarding COVID-19 situation has repeatedly emphasized the importance of 'social distancing' in our fight against this deadly pandemic. 10,11 Yet, there have been violations

We here, consider four such instances that have left country concerned, and have potentially threatened, if not compromised our efforts at containment.

a) **Migrant exodus:** The nation-wide lockdown has been an exceptionally tough decision. We cannot recall a similar example in history when 1.3 billion people have been forced to stay in their respective homes for such a long period. In a democratic country like India, this requires collective accountability. It has also implied that a large number of people lost their reason to stay where they were asked to stay! In a week after the lockdown was declared, various parts of the country reported a massive exodus of migrant workers from urban to rural areas. ^{12,13} It created chaos at the inter-state fringes and lead to a more stringent sealing of borders. ^{7,14,15} Workers were sprayed with disinfectants in a desperate effort to sanitize them as all the guidelines of

- 'social distancing' appear to have been flouted.¹⁶ Photographs of the heavily crowded Anand Vihar bus terminus in Delhi will stay in our country's memory for a long time.¹²
- b) **Tablighi Jamaat epicentre:** Little did the Delhi administration know that thousands of religious delegates from several countries, including those affected by COVID-19, had arrived in the national capital despite stringent restrictions on mass congregation.¹⁷ The ceremonies continued for some days just before the country went under a lockdown resulting in several delegates being stranded at the congregation venue while others spread themselves across this country and abroad.^{17,18} Consequently, it has soon turned out to be a nightmare for our COVID-19 surveillance and contact tracing efforts.¹⁹ The Tablighi Jamaat today is being considered to be the biggest single source for 2019-nCoV in South Asia with several cases and deaths linked to those who attended the congregation while many participants vanished elsewhere or merged into India's huge population.¹⁹
- c) Janata curfew and 'Go Corona!' rallies: On March 22, 2020, India observed a '14-hour self-quarantine' (Citizen's 'Janata curfew'). Three days ago, our Prime Minister had urged his fellow countrymen to practice 'social distancing' amidst restriction of outdoor movement while lauding our dedicated health workers. Although most of the country responded favourably to his call for solidarity, there were incidents where people in their excitement thronged the streets in a celebratory mood shouting slogans of "Go Corona!". These ignorant and irresponsible acts posed serious health risks to hundreds of people and defeated the very philosophy of 'social distancing'. It has also meant that our country has far to go before 'social distancing' gets embedded into our psyche because the war against COVID-19 is poised to be a long drawn one.
- d) **Long queues and panic purchasing:** Despite reassurances of the doorstep availability of essential goods, people anxiously lined up near corner shops immediately after the lockdown was announced. ^{23,24} Shopkeepers from different parts of India later came with their own innovative ways to ensure physical distancing as customers queued up to buy goods in the market. ^{25,26} Some drew circles that were 1m apart from one another while others put up barricades near their counters to ensure a safe distance between vendors and their customers. ^{25,26}

Today, when the country is under a lockdown this implies that everyone has to 'stay-at-home compulsorily', ^{27,28} and

automatically rules out any 'mass gatherings'. Even if the lockdown is later implemented in a mild-to-moderate intensity or eased-off slightly, the practice of 'social distancing' must continue. Physical contact like hand-shakes, hand-holding or hugs, must be avoided. The World Health Organization adds that physical distancing shall continue to play a central role even when the country has reached Level 3 of COVID-19 transmission, i.e. the time when it will be almost impossible to identify all cases and contacts, and everybody must maintain a safe physical distance from everybody else as being the only feasible remedial measure. However, worryingly, a report from the Centre for Diseases Control and Prevention (CDC) in the USA on aerosol distribution characteristics of 2019-nCoV, indicates that its transmission distance might be 4 m (>13 feet) — more than twice currently recommended safe physical distancing guidelines. However, was a support of the USA on aerosol distribution characteristics of 2019-nCoV, indicates that its transmission distance might be 4 m (>13 feet) —

Effective implementation of preventive interventions requires societal efforts and commitment. Today as we Indians exhibit solidarity despite anxiety, seeking social connectivity with family members, neighbours, and friends can help maintain positive mental health. Restricted at home, technology has come to our rescue. The Internet and social media are keeping people socially connected via a virtual world without even sharing the same physical space. Even the WHO²⁹ and Government of India³¹ are using these platforms to increase public access to reliable information on COVID-19 through different media, like, WhatsApp, Facebook, and Twitter,. We have also realized that the buzzword 'social distancing' may be misinterpreted with some people misunderstanding its connotations and drawing themselves away from all forms of social connectedness? 'Physical distancing' is being suggested to be a more 'clear' term. More important than changes in our technical vocabulary our people have to imbibe certain behavioural changes – spanning realms of equity (migrant labourers), religion (Tablighi Jamaat), nationalism ("Go Corona!") and mundane living pursuits (like panic purchases). It seems COVID-19 and social distancing are both here to stay for the foreseeable future.

Source(s) of support

None.

Presentation at a meeting

None.

Declaration of Competing Interest

None to declare.

Acknowledgement

None.

References

- World Health Organization. Rolling updates on coronavirus disease (COVID-19). Updated April 07 2020. Available at: https://www.who.int/emergencies/ diseases/novel-coronavirus-2019/events-as-they-happen; 2020 [Last accessed on April 09 2020].
- Unnithan PSG. Kerala reports first confirmed coronavirus case in India. India Today. UPDATED: January 31, 2020. Available at: https://www.indiatoday.in/ india/story/kerala-reports-first-confirmed-novel-coronavirus-case-in-india-1641593-2020-01-30; January 30 2020 [Last accessed on April 09 2020].
- Government of India. Letter to Chief Secretary. Cabinet Secretory. New Delhi: Ministry of Health and Family Welfare. Government of India; March 22 2020. Available at: https://www.mohfw.gov.in/pdf/ChiefSecyDOLetter.pdf [Last accessed on April 09 2020].

- Government of India. Government of India issues orders prescribing lockdown for containment of COVID19 Epidemic in the country. New Delhi. Available at: https://mha.gov.in/sites/default/files/PR_NationalLockdown_26032020.pdf; March 24 2020 [Last accessed on April 09 2020].
- News Services All India Radio. PM Asks Sportspersons to Spread Message of Positivity, Social Distancing. National News; April 03 2020. Available at: http:// newsonair.com/Main-News-Details.aspx?id=384611 [Last accessed on April 09 2020].
- Ministry of Home Affairs. Press Information Bureau. MHA writes to states to ensure smooth harvesting and sowing operations, while maintaining social distancing, during 21-day lockdown to fight COVID-19. New Delhi. Available at: https://mha.gov.in/sites/default/files/PR_MHAtoStates_03042020.pdf; April 03, 2020 [Last accessed on April 09 2020].
- Ministry of Homes Affairs. Press Information Bureau. MHA Issues Advisory to All States/UTs to Make Adequate Arrangements for Migrant Workers, Students Etc from outside the States to Facilitate Social Distancing for COVID-19. New Delhi: Government of India; March 27, 2020. Available at: https://mha.gov.in/sites/ default/files/PressRelease%20MHAAdvisory_27032020.pdf [Last accessed on April 09 2020].
- DD News. Display nation's collective spirit against COVID-19 by lighting up diyas: PM Modi. National News. Available at: http://ddnews.gov.in/national/ display-nations-collective-spirit-against-covid-19-lighting-diyas-pm-modi; April 04 2020 [Last accessed on April 09 2020].
- 9. Ministry of Health and Family Welfare. Advisory on Social Distancing Measure in View of Spread of COVID-19 Disease. New Delhi: Government of India; 2020. Available at: https://www.mohfw.gov.in/pdf/SocialDistancingAdvisorybyMOHFW.pdf [Last accessed on April 09 2020].
- India Today Web Desk. National lockdown: social distancing only option to fight coronavirus, says PM Modi. New Delhi. Available at: https://www. indiatoday.in/india/story/national-lockdown-social-distancing-only-option-tofight-coronavirus-says-pm-modi-1659276-2020-03-24; March 24 2020 [Last accessed on April 09 2020].
- 11. Livemint PM. Modi's address to the nation on coronavirus: full text of his speech. New Delhi. Updated: 03 Apr 2020. Available at:https://www.livemint.com/news/india/pm-modi-s-address-to-the-nation-on-coronavirus-full-text-11585886771546.html; 2020 [Last accessed on April 09 2020].
- Fadnavis A. Coronaviruslockdown: India grapples with migrant workers' exodus. Aljazeera. Available at: https://www.aljazeera.com/news/2020/03/ coronavirus-lockdown-india-grapples-migrant-workers-exodus-200328151304900.html; March 28 2020 [Last available at April 09 2020.
- Fadnavis A. Mass Exodus Sparks Coronavirus Concerns in India. CNN World; March 30 2020. Available at: https://edition.cnn.com/2020/03/30/india/gallery/india-lockdown-migrant-workers/index.html [Last accessed on April 03 2020].
- 14. Ministry of Home Affairs. Press Information Bureau. As Per the Directions of the Prime Minister, Government Commits All Support to Migrant Workers during Lockdown Period: ShriAmit Shah. New Delhi: Government of India; March 28, 2020. Available at: https://mha.gov.in/sites/default/files/PR_SDRFforRelief CampsMigrantLabourers_%2028032020.pdf [Last accessed on April 03 2020].
- Ministry of Home Affairs. MHA Order. No. 40-3/2020-DM-1(A). New Delhi: Government of India; March 29 2020. Available at: https://mha.gov.in/sites/default/files/PR_MHAOrderrestrictingmovement_29032020.pdf [Last accessed on April 09 2020].
- Aljazeera. Migrants in India sprayed with disinfectant to fight coronavirus.
 March 30 2020. Available at: https://www.aljazeera.com/news/2020/03/migrants-india-sprayed-disinfectant-fight-coronavirus-200330135052425. html; 2020 [Last accessed on April 09 2020].
- ABP Live. Coronavirus: timeline of Tablighijamaat workers violating countrywide lockdown. New Delhi. April 01 2020. Available at: https://news.abplive. com/news/india/coronavirus-lockdown-delhi-nizamuddin-timeline-oftablighi-jamaat-workers-violating-countrywide-lockdown-1185935; 2020 [Last accessed on 03 April 2020].
- Times Now Digital. Delhi coronavirus health bulletin: 53 TablighiJamaat attendees test positive from NizamuddinMarkaz. Delhi. Updated April 01 2020. Available at: https://www.timesnownews.com/delhi/article/delhi-coronavirus-health-bulletin-32-new-covid-19-cases-tally-jumps-to/572647; 2020 [Last accessed on April 03 2020].
- Sharma NC. Coronavirus: Nizamuddin'sTablighiJamaat Has Doubled Cases in India. New Delhi: Livemint; 2020. Updated: 05 Apr 2020. Available at:https://www.livemint.com/news/india/coronavirus-nizamuddin-s-tablighi-jamaat-has-doubled-cases-in-india-11586088692350.html [Last accessed on April092020].
- Khanna P, Nandi S. Janata Curfew: India embraces social distancing to fight novel coronavirus. New Delhi. Updated: 22 Mar 2020. Available at: https:// www.livemint.com/news/india/janata-curfew-india-embraces-socialdistancing-to-fight-novel-coronavirus-11584855677816.html; 2020 [Last accessed on April 09 2020].
- Sharma N. Indians come out in hordes to celebrate Modi's call for social distancing. Quartz India. Available at: https://qz.com/india/1823105/indiahits-street-in-gratitude-amid-modis-social-distance-curfew/; March 23 2020 [Last accessed on April 07 2020].
- Mirror Ahmedabad. Social distancing turns 'anti-social'. Ahmedabad. Updated March 23 2020. Available at: https://ahmedabadmirror.indiatimes.com/ ahmedabad/cover-story/social-distancing-turns-antisocial/articleshow/ 74764838.cms; 2020 [Last accessed on April 08 2020].

- Tandon S. People Rush to Stock up on Essentials amid Covid-19 Outbreak. New Delhi: Livemint; 2020. Updated: Mar 17 2020. Available at:https://www. livemint.com/news/india/people-rush-to-stock-up-on-essentials-amid-covid-19-outbreak-11584384296727.html [Last accessed on April 08 2020].
- Mazumdar P. COVID-19: Defying Social Distancing Norms, People Assemble to Buy Essentials in Assam. Guhawati: The New Indian Express; March 27 2020. Last Updated: March 27 2020. Available at: https://www.newindianexpress.com/ nation/2020/mar/27/covid-19-defying-social-distancing-norms-peopleassemble-to-buy-essentials-in-assam-2122334.html [Last accessed on April 08 2020].
- 25. The Économic Times. Social Distancing: Circles, Squares Drawn outside Maharashtra Shops. March 25 2020. Available at: https://economictimes.indiatimes.com/news/politics-and-nation/social-distancing-circles-squares-drawn-outside-maharashtra-shops/articleshow/74806244.cms?from=mdrhttps://www.newindianexpress.com/nation/2020/mar/27/covid-19-defying-social-distancing-norms-people-assemble-to-buy-essentials-in-assam-2122334.html [Last accessed on April 07 2020].
- Srinivasan C. Fighting coronavirus with squares, circles: social distancing at stores. New Delhi. Available at:https://www.ndtv.com/india-news/ coronavirus-curfew-india-fighting-coronavirus-with-squares-and-circlessocial-distancing-at-grocery-2200320; March 25 2020 [Last accessed on April 09 20201.
- Government of India. Ministry of home affairs order. No. 40-3/2020-DM-1(A). New Delhi: Ministry of Home Affairs; March 24 2020. Available at:https://mha.gov.in/sites/default/files/MHAorder%20copy.pdf [Last accessed onMarch28 2020].
- Government of India. Ministry of Home Affairs. Consolidated Guidelines of MHA on Lockdown Measures on Containment of COVID-19. New Delhi: Ministry of Home Affairs; March 28 2020. Available at: https://mha.gov.in/sites/default/ files/Guidelines.pdf [Last accessed on March28 2020].
- World Health Organization. COVID-19. WHO Emergencies Press Conference on coronavirus disease outbreak. Available at: https://www.who.int/docs/defaultsource/coronaviruse/transcripts/who-audio-emergencies-coronavirus-pressconference-full-20mar2020.pdf?sfvrsn=1eafbff_0; 20 March 2020 [Last accessed on April03 2020].
- 30. Brown L. The coronavirus spreads at least 13 feet, travels on shoes: CDC. New

- York Post. Available at: https://nypost.com/2020/04/12/the-coronavirus-cantravel-at-least-13-feet-new-study-shows/?utm_source=whatsapp_sitebuttons; April 12, 2020 [Last accessed on April 13 2020].
- Government of India. COVID-19.#Indiafightscorona. New Delhi. India. Available at: https://www.mygov.in/covid-19/; 2020 [Last accessed on April03 2020].

Ajeet Singh Bhadoria

Department of Community and Family Medicine, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India

Surabhi Mishra

Department of Community Medicine, Himalayan Institute of Medical Sciences (HIMS), Dehradun, Uttarakhand, India

Archisman Mohapatra

 $Generating\ Research\ In sight\ for\ Development\ (GRID),\ New\ Delhi,\ India$

Anjana Singh

Department of Biochemistry and Molecular Biology, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India

Ravi Kant, Samiran Nundy

All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India

* Corresponding author.

E-mail address: ajeetsinghbhadoria@gmail.com (A.S. Bhadoria).

15 April 2020 Available online 26 May 2020